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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,402	04/19/2004	Hung-Hsiang Ych	TSAI 138	9927
RABIN & BE	7590 01/25/2008 RDO P C	·	EXAMINER	
1101 14 Street	t, N.W., Suite 500		SAUNDERS JR, JOSEPH	
Washington, Do	C 20005		ART UNIT	PAPER NUMBER
			2615	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)			
	10/826,402	YEH, HUNG-HSIANG			
Office Action Summary	Examiner	Art Unit			
	Joseph Saunders	2615			
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet wit	th the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REI WHICHEVER IS LONGER, FROM THE MAILING Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory peri Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 1.136(a). In no event, however, may a re od will apply and will expire SIX (6) MONT tute, cause the application to become ABA	CATION. ply be timely filed ITHS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 25	<u> October 2007</u> .				
,					
3) Since this application is in condition for allow					
closed in accordance with the practice unde	er Ex parte Quayle, 1935 C.D.	. 11, 453 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>1-20</u> is/are pending in the applicati	on.				
4a) Of the above claim(s) is/are without	Irawn from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-20</u> is/are rejected.					
7) Claim(s) is/are objected to.	., .				
8) Claim(s) are subject to restriction and	d/or election requirement.				
Application Papers					
9)⊠ The specification is objected to by the Exam	iner.				
10)⊠ The drawing(s) filed on 19 April 2004 is/are:	a)⊠ accepted or b)□ object	ted to by the Examiner.			
Applicant may not request that any objection to t	he drawing(s) be held in abeyand	ce. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the corr					
11)☐ The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) ☐ Acknowledgment is made of a claim for fore a) ☐ All b) ☐ Some * c) ☐ None of:	ign priority under 35 U.S.C. §	119(a)-(d) or (f).			
1. Certified copies of the priority docume					
2. Certified copies of the priority docume					
3. Copies of the certified copies of the p		received in this National Stage			
application from the International Bur * See the attached detailed Office action for a	•	received			
See the attached detailed Office action for a f	ist of the certified copies flot i	,			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview St	ummary (PTO-413))/Mail Date			
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 		formal Patent Application			

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DETAILED ACTION

This office action is in response to the communications filed October 25, 2007.
 Claims 1 – 20 are currently pending and considered below.

Specification

2. The substitute specification filed October 25, 2007 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because: Improper use of underline, brackets, and strikethrough. Therefore, the objection to the specification is maintained.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung et al. (US 2005/0015260 A1), hereinafter <u>Hung</u>, in view of Tse Chun Hin (US 2005/0047071 A1), hereinafter <u>Tse Chun Hin</u>.

Claim 1: Hung discloses a compressed digital music adapting apparatus for vehicles (MP3 application device 200, Figure 2), the apparatus comprising: a main body of an adaptor having a USB port (USB host circuit 112) and a cigarette-lighter charger port (DC power supply connection for receiving the DC power (12V) from a cigar lighter);

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and an FM modulator/transmitter for modulating and transmitting (frequency modulation transmitter 270) compressed digital music (MP3). Hung also discloses "a voltage transformer for supplying power to various circuit within the MP3," Paragraph 19, but does not disclose the specifics as to the connections and therefore does not disclose the voltage transformer or power regulator inside the main body of the adaptor and selectively electrically coupled to the USB port or the cigarette-lighter charger port for regulating a voltage from the USB port or the cigarette-lighter charger port to a suitable level for supplying to the FM modulator/transmitter.

Tse Chun Hin discloses a similar apparatus for transmitting music within a vehicle. Tse Chun Hin further disclose that "a suitable transformer can be incorporated in the cradle, typically to provide a 5V supply for the player 10 and the radio frequency transmitter," Paragraph 28. Tse Chun Hin illustrates in Figure 4 that the voltage transformer 33 is coupled to the car cigarette lighter 32 to supply the FM stereo transmitter 35 the suitable level of 5V.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to couple the components as disclosed by <u>Hung</u>, in a manner as disclosed by <u>Tse Chun Hin</u>, thereby enabling suitable power to be supplied to the FM transmitter.

Claim 6: <u>Hung</u> and <u>Tse Chun Hin</u> disclose the apparatus of claim 1, wherein the cigarette-lighter charger port and the USB port are located opposite each other on the main body of the adaptor (<u>Tse Chun Hin</u> Figures 1 and 2).

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Claim 8: <u>Hung</u> and <u>Tse Chun Hin</u> disclose the apparatus of claim 1, wherein the cigarette-lighter charger port and the USB port are located on a same side of the main body of the adaptor (<u>Hung</u> Figure 2).

4. Claims 2 – 4, 7, and 14 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Hung</u> and <u>Tse Chun Hin</u> in view of Tak (KR 2002-0054686), hereinafter <u>Tak</u>, and Fouladpour (US 6,608,264 B1), hereinafter <u>Fouladpour</u>.

Claim 2: Hung and Tse Chun Hin disclose the apparatus of claim 1, and Hung further discloses the apparatus comprising: a digital music player (MP3 decoder 126, Figure 2). In an alternate embodiment Hung also discloses a similar device where the FM transmitter 270 is omitted in place of a loudspeaker 150 for broadcasting. Hung does not disclose incorporating the loudspeaker and the FM transmitter in the same device however Tak discloses a similar device that does incorporate both the option of broadcasting from an FM transmitting module or broadcasting to a speaker/earphone disposed in the terminal through the external output port 220 (Figure 2). Since Hung does not disclose a FM transmitter and a loudspeaker in the same embodiment like Tak, Hung and Tse Chun Hin therefore do not disclose an audio switch for selecting between and transmitting the compressed digital music to a first medium and a second medium. But given the teachings off Tak and the two embodiments taught by Hung it would have been obvious to one of ordinary skill in the art at the time of the invention to

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incorporate both a FM transmitter and an loudspeaker with a switch selecting between the two different mediums in the system of Hung and Tse Chun Hin thereby enabling the user control over whether the outputted audio signal is sent to the loudspeaker or broadcast by the FM transmitter. Hung and Tse Chun Hin also do not disclose a power switch for switching between the USB port and the cigarette-lighter charger port. Fouladpour discloses a situation where an audio file player 302 can connect to a computer through USB or an alternate power source through a car-lighter socket (Figure 3 and Column 4 Lines 2 – 3, 19 – 31, and Column 4 Line 54 – Column 5 Line 5). Fouladpour goes on to describe how some audio players operate in modes, for instance an audio player runs off its own batteries and is in music playback mode when it does not receive power from a data cable (USB), and on the other hand the audio player is in a data storage and transfer mode when it receives power from a data cable (USB). Therefore providing a switch enables the device to switch between modes without having to unplug cables and also enables the selection of a primary power source or an alternate power source without having to unplug cables. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include a switch in the system of Hung, Tse Chun Hin, and Tak as disclosed by Fouladpour since the power switch would enable the user of the system to avoid the need to plug and unplug cables avoiding wear and tear on the connectors of the power sources.

Claim 3: Hung, Tse Chun Hin, Tak, and Fouladpour disclose the apparatus of claim 2, and Hung further discloses wherein the first medium comprises at least a speaker or a

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headphone (loudspeaker 150, Figure 1).

Claim 4: <u>Hung</u>, <u>Tse Chun Hin</u>, <u>Tak</u>, and <u>Fouladpour</u> disclose the apparatus of claim 2, and <u>Hung</u> further discloses wherein the second medium comprises at least a vehicular speaker (Car Audio-Stereo System 280, Figure 2).

Claim 7: Claim 7 is substantially similar in scope to claims 2 – 4 and therefore is rejected for the same reasons.

Claim 14: Claim 14 is substantially similar in scope to claim 2 and therefore is rejected for the same reasons.

Claim 15: Claim 15 is substantially similar in scope to claim 4 and therefore is rejected for the same reasons.

Claim 16: Claim 16 is substantially similar in scope to claim 3 and therefore is rejected for the same reasons.

Claim 17: Claim 17 is substantially similar in scope to claim 4 and therefore is rejected for the same reasons.

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Claim 18: Claim 18 is substantially similar in scope to claims 6 and therefore is rejected for the same reasons.

Claim 19: Claim 19 is substantially similar in scope to claims 2 – 4 and therefore is rejected for the same reasons.

Claim 20: Claim 20 is substantially similar in scope to claims 8 and therefore is rejected for the same reasons.

5. Claims 5 and 9 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Hung</u> and <u>Tse Chun Hin</u> in view of Kang (KR 2003-0068119), hereinafter <u>Kang</u>.

Claim 5: <u>Hung</u> and <u>Tse Chun Hin</u> disclose the apparatus of claim 1, <u>Hung</u> and <u>Tse Chun Hin</u> do not disclose wherein the main body of the adaptor further comprises an audio-in jack, wherein the audio-in jack is used to connect to an audio-out plug of a digital music player. <u>Kang</u> discloses a similar device with a USB port for connection with a USB device and also an analog connection port 500 for connection with an analog connection terminal 510. The analog connection port 500 allows for other audio devices, i.e. cassette player, CD player, MD player, MP3 player, to connect to the device so that the analog audio signal output from the other audio devices can be selected to be modulated by an RF transmitter (Paragraph 46 and 47). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include an audio-

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in jack as disclosed by <u>Kang</u> in the system of <u>Hung</u> and <u>Tse Chun Hin</u> since this would allow for other devices to interface with the system of <u>Hung</u> and <u>Tse Chun Hin</u> for FM transmission thereby making the system of <u>Hung</u> and <u>Tse Chun Hin</u> more versatile.

Claim 9: Hung discloses a compressed digital music adapting apparatus for vehicles (MP3 application device 200, Figure 2), the apparatus comprising: a main body of an adaptor having a USB port (USB host circuit 112) and a cigarette-lighter charger port (DC power supply connection for receiving the DC power (12V) from a cigar lighter); and an FM modulator/transmitter for modulating and transmitting (frequency modulation transmitter 270) compressed digital music (MP3). Hung also discloses "a voltage transformer for supplying power to various circuit within the MP3," Paragraph 19, but does not disclose the specifics as to the connections and therefore does not disclose the voltage transformer or power regulator inside the main body of the adaptor and selectively electrically coupled to the USB port or the cigarette-lighter charger port for regulating a voltage from the USB port or the cigarette-lighter charger port to a suitable level for supplying to the FM modulator/transmitter.

Tse Chun Hin discloses a similar apparatus for transmitting music within a vehicle. Tse Chun Hin further disclose that "a suitable transformer can be incorporated in the cradle, typically to provide a 5V supply for the player 10 and the radio frequency transmitter," Paragraph 28. Tse Chun Hin illustrates in Figure 4 that the voltage transformer 33 is coupled to the car cigarette lighter 32 to supply the FM stereo transmitter 35 the suitable level of 5V.

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Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to couple the components as disclosed by <u>Hung</u>, in a manner as disclosed by <u>Tse Chun Hin</u>, thereby enabling suitable power to be supplied to the FM transmitter.

Hung and Tse Chun Hin do not disclose the system having an audio-in jack.

Kang discloses a similar device with a USB port for connection with a USB device and also an analog connection port 500 for connection with an analog connection terminal 510. The analog connection port 500 allows for other audio devices, i.e. cassette player, CD player, MD player, MP3 player, to connect to the device so that the analog audio signal output from the other audio devices can be selected to be modulated by an RF transmitter (Paragraph 46 and 47). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include an audio-in jack as disclosed by Kang in the system of Hung and Tse Chun Hin since this would allow for other devices to interface with the system of Hung and Tse Chun Hin for FM transmission thereby making the system of Hung and Tse Chun Hin more versatile.

Claim 10: <u>Hung</u>, <u>Tse Chun Hin</u>, and <u>Kang</u> disclose the apparatus of claim 9, and <u>Hung</u> and <u>Kang</u> further discloses wherein the vehicle further comprises an FM receiver (FM receiver 282) for receiving the compressed digital music, and at least an amplifier for broadcasting the compressed digital music (Car Audio-Stereo System 280, <u>Hung</u> Figure 2).

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Claim 11: Claim 11 is substantially similar in scope to claims 6 and therefore is rejected for the same reasons.

Claim 13: Claim 13 is substantially similar in scope to claims 8 and therefore is rejected for the same reasons.

6. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Hung</u>, <u>Tse Chun Hin</u>, and <u>Kang</u> in view of <u>Tak</u> and <u>Fouladpour</u>.

Claim 12: Claim 12 is substantially similar in scope to claims 2 – 4 and therefore is rejected for the same reasons.

Response to Arguments

7. Applicant's arguments with respect to claim 1 – 20 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Saunders whose telephone number is (571) 270-1063. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. - 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ĴS

January 16, 2008

SINHTRAN

SUPERVISORY PATENT EXAMINER